## **CLAIMS**

What is claimed is:

 A diaphragm-type carburetor comprising an air intake pathway that penetrates a body,

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a constant fuel chamber that is provided along one face of the body and contains a constant amount of fuel by means of a diaphragm,

a butterfly-type throttle valve that opens and closes the air intake pathway, an air-fuel pathway that penetrates the body between the air intake pathway and fuel metering chamber,

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a fuel nozzle that supplies fuel introduced from the constant fuel chamber to the air-fuel pathway,

a metering pin having a tip thereof inserted into the fuel nozzle,

a cam member with an arc-shaped cam face centered on a valve stem of the throttle valve, and

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an actuating member that makes constant contact with the cam face and reciprocates linearly, wherein the metering pin is held by the actuating member and reciprocates linearly following the opening and closing operation of the throttle valve to control the amount of fuel supplied from the fuel nozzle to the air-fuel pathway.

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2. The diaphragm-type carburetor according to claim 1, wherein the actuating member has a retaining member, a c-shaped following member, and

a follower in contact with the cam face, the follower is biased against the cam face under the force of a spring interposing the retaining member and the following member, the retaining member has an open-ended, tube-like shape and is disposed in a region on the outside of the cam member, and the follower comprises adjustment screw screwed into a top leg of the following member to adjust the insertion depth of the metering pin into the fuel nozzle.

- 3. The diaphragm-type carburetor according to claim 1, wherein the cam member serves as a throttle lever attached to the valve stem so that acceleration control is transmitted to and opens or closes the throttle valve.
  - A diaphragm-type carburetor comprising an air intake pathway that penetrates a body,

a constant fuel chamber that is provided along one face of the body and contains a constant amount of fuel by means of a diaphragm,

a butterfly-type throttle valve that opens and closes the air intake pathway, an air-fuel pathway that penetrates the body between the air intake pathway and fuel metering chamber,

a fuel nozzle that is moveably mounted within the body and supplies fuel introduced from the constant fuel chamber to the air-fuel pathway, a metering pin having a tip thereof inserted into the fuel nozzle,

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a cam member with an arc-shaped cam face centered on a valve stem of the throttle valve, and

an actuating member that makes constant contact with the cam face and reciprocates linearly, wherein the metering pin is held by the actuating member and reciprocates linearly following the opening and closing operation of the throttle valve to control the amount of fuel supplied from the fuel nozzle to the air-fuel pathway.

- 5. The diaphragm-type carburetor according to claim 4, wherein the actuating member has a retaining member, a c-shaped following member, and a follower in contact with the cam face, the follower is biased against the cam face under the force of a spring interposing the retaining member and the following member, the retaining member has an open-ended, tube-like shape and is disposed in a region on the outside of the cam member, and the follower comprises adjustment screw screwed into a top leg of the following member to adjust the insertion depth of the metering pin into the fuel nozzle.
- 6. The diaphragm-type carburetor according to claim 1, wherein the cam member serves as a throttle lever attached to the valve stem so that acceleration control is transmitted to and opens or closes the throttle valve.

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